

REMARKS

Claims 1, 3-8, 11 15, and 17-20 were pending, including independent claims 1, 8 and 15. All claims are again rejected on the basis of the same prior art as before, although the Office Action further explains the reasoning for the rejections and cites a new supporting reference, U.S. Patent 6,216,103 ("Wu").

Initially, Applicants disagree with the designation of the Office Action as FINAL and respectfully request withdrawal of the finality of the Office Action. The present Office Action is the first Office Action following Applicants' Amendment and Response dated March 17, 2008 and a Request For Continued Examination filed on the same date. Owing to the March 17th Amendment and Response, many claims were presented for the first time. For example, although claim 1 was amended to include the feature of dependent claim 2, dependent claims 5-7 had not previously depended from claim 2. Therefore, following that amendment, claims 5-7 defined combinations of limitations that were new and had not been examined before. The same is true of the other two claim sets. Accordingly, because the subject matters of many claims were presented for the first time, Applicants respectfully submit that the finality of the present Office Action was not proper and earnestly request the withdrawal of finality.

Turning to the merits of the Office Action, all pending claims are rejected under 35 U.S.C. § 103(a) as obvious over Fujii, Keiller and Bi. Applicants have amended the independent claims to clarify that in Applicants' claimed invention, each of the "plurality of pieces of speech data" includes a speech region and a varying period of a non-speech region, and that a start position of the speech region is identified initially (support in Application at, e.g., Par. 24-26). Claims 11 and 19 have been cancelled.

The primary reference, Fujii, discloses that errors in the detection of the speech period can occur due to noise, and Fujii addresses this problem not by attempting to determine the actual starting point of speech, but rather by applying the recognition algorithm to multiple "proposed speech periods" (e.g., col. 2, lines 16-18, 38-56; col. 14, lines 7-16; col. 8, lines 24-31). This way, Fujii does not require the detection of the actual speech period (col. 3, lines 21-22); Fujii does not know and does not need to know the actual starting point of speech. In contrast, Applicants' invention first identifies a start position of the speech region and adds varying periods of the preceding non-speech region. Moreover, whereas Fujii is concerned with the problem of detecting the actual speech period in the presence of noise, Applicants' invention

is concerned with how a varying level of noise may affect recognition accuracy (even if the speech period is known) (Application, e.g., at Par. 5-6, 16).

The Office Action cites Bi as disclosing the allegedly "well known means of achieving the multiple speech data periods" by sequentially shifting back from a determined starting point a predetermined time. Applicants respectfully disagree. Bi describes a detailed process that ends by determining a single set of start and stop points of a speech period. Bi does not "consider multiple starting points" or disclose "different possible starting points" as the Office Action asserts. Further, the beginning point of the Bi's process is not the start of the speech period (as in Applicants' invention), but rather is simply a point where the SNR reaches a first arbitrary threshold value.

Also, Fujii and Bi cannot be combined as suggested by the Office Action because the references are incompatible. Bi's process is directed at finding the speech period, but a key feature of Fujii is not needing to determine or know the actual speech period. If the actual speech period were known from Bi's process, Fujii's process would not be needed.

Finally, the newly cited Wu is like Bi. Wu describes an iterative process that begins at a threshold value and then looks for the actual starting and ending points of a speech period. Therefore, Wu also is not applicable.

Request for Interview

If the Examiner believes this application still is not in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at 312-321-4723 to discuss any remaining issues.

Respectfully submitted,


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